### Regional HIV/AIDS Epidemiologic Profile of Bristol County, Massachusetts: 2011

#### Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed while residing in another state before being reported in Massachusetts. As of January 1, 2011, this resulted in the removal of 2,297 HIV/AIDS cases, of which 739 have died and 1,558 were living. These persons living with HIV/AIDS may currently reside and receive care in the Commonwealth. The total number of persons living in Massachusetts with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis, if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males: those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent HIV diagnoses among females are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

# Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2010: Bristol County, Massachusetts<sup>2</sup>

	N	%
People Living with HIV/AIDS	1,043	55%
People Reported with HIV or AIDS who are Deceased	864	45%
Total Number of People Reported with HIV Infection or		
AIDS	1,907	100%

<sup>&</sup>lt;sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999
<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

## Table 2. Average annual rate of HIV infection diagnosis from 2007 to 2009 and HIV/AIDS prevalence rate on 12/31/10<sup>1</sup>: Bristol County, Massachusetts<sup>2</sup>

Average annual HIV diagnosis rate from 2007–2009	Average rate per 100,000	Average annual number of HIV diagnoses
Bristol County, MA	6.9	37.7
Massachusetts Total	9.4	607.3

HIV/AIDS prevalence rate		Number of people
on 12/31/10	Rate per 100,000	living with HIV/AIDS
Bristol County, MA	190.4	1,043
Massachusetts Total	273.7	17,621

<sup>&</sup>lt;sup>1</sup> The denominators for prevalence calculations are based on year 2005 population estimates from the MDPH Bureau of Health Statistics, Research and Evaluation.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2000–2009, Bristol County, Massachusetts<sup>3</sup>

Year	HIV/AIDS Prevalence	Diagnosis of HIV Infection			
2000	005	27	75		
2000 2001	885 908	27 39	75 62		
2002	936	39	67		
2003	948	35	47		
2004	970	27	49		
2005	986	29	45		
2006	997	24	35		
2007	1,014	25	42		
2008	1,016	31	33		
2009	1,028	26	38		

<sup>&</sup>lt;sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/11

<sup>&</sup>lt;sup>2</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available 10 year period after the implementation of HIV infection reporting in 1999. 
<sup>3</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 4. People diagnosed with HIV infection from 2007–2009<sup>1</sup> and people living with HIV/AIDS on December 31, 2010 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Bristol County, Massachusetts<sup>2</sup>

	HIV Infection I	Diagnoses	PLWH/A			
Gender:	N	%	N	%		
Male	86	76%	675	65%		
Female	27	24%	368	35%		
Place of Birth:	N	%	N	%		
US	82	73%	826	79%		
Puerto Rico/US Dependency <sup>3</sup>	12	11%	106	10%		
Non-US	19	17%	111	11%		
Race/Ethnicity:	N	%	N	%		
White (non-Hispanic)	65 <sup>7</sup>	58%	634	61%		
Black (non-Hispanic)		<b></b> <sup>7</sup>	190	18%		
Hispanic/Latino	25	22%	211	20%		
Other/Undetermined <sup>4</sup>	<sup>7</sup>	<sup>7</sup>	8	1%		
Exposure Mode:	N	%	N	%		
Male-to-male sex (MSM)	40	35%	255	24%		
Injection Drug Use (IDU)	19 <sup>7</sup>	17%	365	35%		
MSM/IDU		7	32	3%		
Heterosexual Sex	1 <b>7</b>	15%	202	19%		
Other		<sup>7</sup>	25	2%		
Total Undetermined	35	31%	164	16%		
<ul> <li>Presumed Heterosexual Sex<sup>5</sup></li> <li>Undetermined<sup>6</sup></li> </ul>	10 25	9% 22%	57 107	5% 10%		
Age:	N	<u> </u>	N	<u> </u>		
7.go.	At Diagno			nber 31, 2010		
Under 13	•	0%	2	<1%		
13 to 19	0 <sup>7</sup>	7	9	1%		
20 to 24	7	6%	17	2%		
25 to 29	12	11%	27	3%		
30 to 34	12	11%	51	5%		
35 to 39	14	12%	87	8%		
40 to 44	21	19%	202	19%		
45 to 49	25	22%	248	24%		
50 to 54	12	11%	201	19%		
55 to 59	6	5%	111	11%		
60+		7	88	8%		
Total	113	100%	1,043	100%		

<sup>1</sup>Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>6</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>7</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/11

Table 5. People living with HIV/AIDS on December 31, 2010 by gender and race/ethnicity: Bristol County, Massachusetts<sup>1</sup>

	Male		Female		
Race/Ethnicity:	N	%	N	%	
White (non-Hispanic)	442	65%	192	52%	
Black (non-Hispanic) Hispanic/Latino	104 <sup>3</sup>	15% <sup>3</sup>	86 <sup>3</sup>	23% <sup>3</sup>	
Other/Undetermined <sup>2</sup>	<b></b> <sup>3</sup>	<b></b> <sup>3</sup>	<b></b> <sup>3</sup>	<b></b> <sup>3</sup>	
Total	675	100%	368	100%	

Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of

#### Table 6. People living with HIV/AIDS on December 31, 2010 by gender and exposure mode: Bristol County, Massachusetts<sup>1</sup>

	Male		Female	•
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	255	38%	N/A	N/A
Injection drug use (IDU)	217	32%	148	40%
MSM/IDU	32	5%	N/A	N/A
Heterosexual sex	63	9%	139	38%
Other	16	2%	9	2%
Total Undetermined	92	14%	72	20%
<ul> <li>Presumed heterosexual sex<sup>2</sup></li> </ul>	N/A	N/A	57	15%
<ul> <li>Undetermined<sup>3</sup></li> </ul>	92	14%	15	4%
Total	675	100%	368	100%

Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of

<sup>&</sup>lt;sup>2</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

<sup>3</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

<sup>&</sup>lt;sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>4</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of

confidentiality.

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	Male		Female		
	N	%	N	%	Total
2000	48	64%	27	36%	75
2001	41	66%	21	34%	62
2002	42	63%	25	37%	67
2003	34	72%	13	28%	47
2004	38	78%	11	22%	49
2005	38	84%	7	16%	45
2006	24	69%	11	31%	35
2007	31	74%	11	26%	42
2008	26	79%	7	21%	33
2009	29	76%	9	24%	38

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	White	White NH		Black NH Hispanic/Latino Other/ Undetermined <sup>3</sup>			Black NH		Hispanic/Latino		Total
	N	%	N	%	N	%	N	%			
2000	40	53%	19	25%	4	4	4	4	75		
2001	46	74%	9	15%	7	11%	0	0%	62		
2002	39	58%	14	21%	14	21%	0	0%	67		
2003	35	74%	7	15%	5	11%	0	0%	47		
2004	26	53%	9	18%	14	29%	0	0%	49		
2005	29	64%	11	24%	4	4	4	4	45		
2006	24	69%	8	23%	4	4	4	4	35		
2007	25	60%	8	19%	4	4	4	4	42		
2008	23	70%	5	15%	5	15%	0	0%	33		
2009	17	45%	9	24%	12	32%	0	0%	38		

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

	US		Puerto l US Depen	_	Non-U	IS	
	N	%	N	%	N	%	Total
2000	55	73%	6	8%	14	19%	75
2001	52	84%	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	62
2002	44	66%	11	16%	12	18%	67
2003	39	83%	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	47
2004	35	71%	8	16%	6	12%	49
2005	37	82%	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	45
2006 2007	27 31	77% 74%	<sup>4</sup>	<sup>4</sup>	<sup>4</sup> <sup>4</sup>	<sup>4</sup> <sup>4</sup>	35 42
2008	25	76%	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	<sup>4</sup>	33
2009	26	68%	5	13%	7	18%	38

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

N	ISM	ID	U	MS ID		нт	SX	Otl	ner	Pre HTS	_		eter- ned <sup>4</sup>	Total
N	l %	N	%	N	%	N	%	N	%	N	%	N	%	N
2000 20 2001 1: 2002 1: 2003 1: 2004 1: 2005 20 2006 1: 2007 1: 2008 1: 2009 1:	2 19% 5 22% 3 28% 7 35% 0 44% 6 46% 6 38% 2 36%	20 20 25 13 8 9 <sup>5</sup> 9	27% 32% 37% 28% 16% 20%5 21% 15% 13%	5 -5 -5 -7 5 -7 0 0 5 0	<sup>5</sup> <sup>5</sup> <sup>5</sup> 0% <sup>5</sup> 0% <sup>5</sup>	18 10 16 10 7 <sup>5</sup> <sup>5</sup> 6	24% 16% 24% 21% 14% <sup>5</sup> <sup>5</sup> 14% <sup>5</sup>	<sup>5</sup> <sup>5</sup> 0 0 <sup>5</sup> 0 <sup>5</sup>	<sup>5</sup> <sup>5</sup> 0% 0% <sup>5</sup> 0% 0% <sup>5</sup> 0% <sup>5</sup> 0%	55,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5	7%555555555	10 11 6 <sup>5</sup> 13 7 10 8 7	13% 18% 9% <sup>5</sup> 27% 16% 29% 19% 21% 26%	75 62 67 47 49 45 35 42 33

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Ninety-seven percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 3% were born in an unknown dependency.

<sup>&</sup>lt;sup>4</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality. Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>5</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality.

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Bristol County, Massachusetts<sup>1</sup>, 2000–2009<sup>2</sup>

HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
N	N	%
29		39%
32	62	52%
27	67	40%
16	47	34%
19	49	39%
17	45	38%
13	35	37%
18	42	43%
14	33	42%
19	38	50%
	diagnosed within two months  N  29 32 27 16 19 17 13 18 18 14	diagnosed within two months         All HIV infection diagnoses           N         N           29         75           32         62           27         67           16         47           19         49           17         45           13         35           18         42           14         33

<sup>&</sup>lt;sup>1</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/11

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Bristol County, Massachusetts, <sup>1</sup> 2007–2009<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male Female	38 13	86 27	44% 48%
Race/Ethnicity:	N	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Other/Undetermined <sup>3</sup>	32 10 <sup>5</sup> <sup>5</sup>	65 22 <sup>5</sup> <sup>5</sup>	49% 45% <sup>5</sup> <sup>5</sup>
Place of Birth:	N	N	%
US Puerto Rico/US Dependencies <sup>4</sup> Non-US <b>Total</b>	<sup>5</sup> <sup>5</sup> 9 <b>51</b>	<sup>5</sup> <sup>5</sup> 19 <b>113</b>	<sup>5</sup> <sup>5</sup> 47% <b>45%</b>

Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. Other/Undetermined includes Asian/Pacific Islander, American Indian/Alaska Native and people of unspecified

race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Ninety-nine percent of people diagnosed with HIV infection from 2007–2009 who were born in a US dependency were

born in Puerto Rico, <1% were born in the US Virgin Islands and <1% were born in Guam.

<sup>5</sup> Numbers less than 5 for localities with populations of less than 50,000 are suppressed for the assurance of confidentiality

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/11